### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-015521 Address: 333 Burma Road **Date Inspected:** 22-Jun-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** ZPMC and ABF **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes N/A **Delayed / Cancelled:** No

34-0006 **Bridge No: Component:** OBG 13 section

## **Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. Wai Pau, was present during the times noted above for observations relative to the work being performed.

#### Bay#14

Caltrans QA Inspector observed four welders performed FCAW fillet weld process on stiffeners that connected to T-joint steel plate PL3243A of side plate #SP3063A with 22mm wall thick. The minimum preheat and maximum interpass temperature requirements for FCAW fillet weld are 110C degree and 230 C degree. The FCAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

Caltrans QAI observed a ZPMC heat straightening operator performed heat straightening with ZPMC Heat Straightening Report (HSR) #8649 on side plates. The side plate ID is SP3097A with 22mm wall thick. The heating temperature is maximum 650 C (1200 F) and cool in still air. All the plates for heat straightening have been inspected and recorded by ZPMC QC. Based on Caltrans QAI observation, no discrepancies were noted.

Caltrans QA inspector observed a fit up groups performed fit up and SMAW tack weld process on T-joint fillet weld. The T-joint is attached to stiffeners and 22mm wall thick plate # PL3240A and PL3384AA of 13CW section of side plates. The side plate number is SP3060Aand SP3092A. A numerous temporary tack welds have been welded attach between side plate and stiffeners after adjusted and secured by hand jack. The fit up SMAW tack welding process were monitored and recorded by ZPMC and ABF QC inspector. Base on Caltrans QAI observation, no discrepancies were noted.

## WELDING INSPECTION REPORT

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## Bay#16

Caltrans QA Inspector observed a welding operator in process of semi-automatic SAW on CJP butt joint weld. The CJP weld is attached to 100mm wall thick base plate of 13AW section of west line. This section is a SPM member. The weld number and plate number are BP3074-001-001/PL3366B and PL3365C (side A). The minimum preheat for SPM member CJP weld is 160C degree. The semi-automatic SAW process was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted. Caltrans QAI observed a ZPMC heat straightening operator performed heat straightening with ZPMC Heat Straightening Report (HSR) #8641 on base plates. The base plate ID is PL3361C and PL3362C with 100mm wall thick. The heating temperature is maximum 650 C (1200 F) and cool in still air. All the plates for heat straightening have been inspected and recorded by ZPMC QC. Based on Caltrans QA inspector observation, no discrepancies were noted.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

## **Summary of Conversations:**

As notes within report above

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact James Devey 15000026784, who represents the Office of Structural Materials for your project.

Inspected By:	Pau,Wai	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer